

Dean K. Matsuura Manager Regulatory Affairs

December 2, 2008

The Honorable Chairman and Members of the Hawaii Public Utilities Commission Kekuanaoa Building, First Floor 465 South King Street Honolulu, Hawaii 96813

Dear Commissioners:

Subject: Docket No. 2008-0083

HECO 2009 Test Year Rate Case Rate Case Updates – Set #2

Enclosed is the second set of updates to Hawaiian Electric Company, Inc.'s ("HECO") 2009 test year estimates reflected in the Application, Direct Testimonies, Exhibits, and Workpapers filed with the Commission on July 3, 2008. This set includes updates to the following:

• HECO T-14 - Bruce Tamashiro

Very truly yours,

Dean K. Matsuura

Enclosure

cc: Division of Consumer Advocacy
Michael L. Brosch, Utilitech, Inc.
Joseph A. Herz, Sawvel & Associates, Inc.
Dr. Kay Davoodi, Department of Defense
David C. Coker / Gayle B. Chestnut, Department of Defense
Ralph Smith, Larkin & Associates

#### RATE CASE UPDATE

### Ref: B. Tamashiro, HECO T-14, Miscellaneous Administrative and General Expenses and Depreciation Expense and Accumulated Depreciation.

(Attachments 1 to 5 and Attachment 7 of this update contain confidential information and are being provided subject to the Protective Order filed on November 21, 2008.)

For HECO T-14, adjustments were made to: 1) increase the 2009 test year expense for Account No. 9302 Miscellaneous General Expenses by \$447,000; 2) increase the 2009 test year amounts for Account No. 931 Rent Expense by \$841,000; 3) increase the 2009 test year amounts for Account No. 932 Maintenance of General Plant by \$120,000; 4) decrease the 2009 test year amounts for depreciation expense by \$217,000; and 5) decrease the 2009 test year amounts for accumulated depreciation by \$146,000.

#### ACCOUNT NO. 9302 MISCELLANEOUS GENERAL EXPENSES UPDATE

The increase in Miscellaneous General Expenses are primarily related to the following increases in research and development ("R&D") projects as follows:

Develop and Demonstrate New Technology – AMI
 \$ 197,000

• Other Long-Term R&D strategies – Oahu Electric System Analysis <u>250,000</u>

Total increase in Miscellaneous General Expenses <u>\$ 447,000</u>

Refer to page 14 for an updated R&D expenses exhibit (revised HECO-1406, page 1).

#### Develop & Demonstrate New Technology (AMI)

The Company increased its test year 2009 estimate for the Advanced Meter Infrastructure ("AMI") R&D project by \$197,000 due to the Company's plans to 1) extend the current eMeter contract into the first quarter of 2009, 2) select either eMeter or Itron for Phase 2 testing for the

remaining nine months in 2009, and 3) contract with Luminant to continue information technology support. Refer to the Company's response to CA-IR-158 for additional information on the Company's plans with respect to the AMI R&D projects. The Attachments to CA-IR-158, which were submitted on December 1, 2008, pursuant to the protective order issued on November 21, 2008, represent copies of the existing eMeter, Itron and Luminant contracts.

#### Other Long-Term R&D Strategies (Oahu Electric System Analysis)

The Company proposed to increase its test year 2009 estimate for the Oahu Electric System Analysis ("Oahu study") by \$275,000 due to the receipt of a rough order-of-magnitude ("ROM") estimate for the Oahu study from General Electric ("GE"), as discussed in the Company's response to CA-IR-161. GE's ROM estimate for the Oahu study amounted to \$950,000. The Company had originally included an estimate of \$352,000 in the 2009 test year estimate. In November 2008, the Company executed a consulting services agreement for the Oahu study with the University of Hawaii (GE is under contract with the University of Hawaii's Hawaii Natural Energy Institute ("HNEI") to perform the Oahu study), to perform the Oahu study at a slightly reduced price of \$925,000. Attachment 5 at 15. Therefore, as part of this update, the Company proposes to increase its 2009 estimate for the Oahu study by \$250,000. The Company anticipates to fund the Oahu study as follows:

Source of Funds	Year	CA-IR-161	Rate Case Update
HECO	2008	\$ 72,000	\$ 72,000
HECO – original estimate	2009	352,000	352,000
HECO – reallocation	2009	75,000	75,000
HNEI/USDOE cost share	2009	176,000	176,000
HECO – TY 2009 Adj	2009	275,000	250,000
Total Oahu Wind Stud	ly Phase 1	\$ 950,000	\$ 925,000

The \$75,000 reallocation in the 2009 test year represents the original budgeted funds for the Company's Maui Wind Study Phase 2 which will be used for the Oahu Wind Study Phase I.

Refer to the Company's response to part "a" of CA-IR-160 for more information on this reallocation. This reallocation does not require an adjustment to the test year estimate.

#### ACCOUNT NO. 931 RENT EXPENSE UPDATE

The increase in Rent Expense is due to additional office spaces required for the additional staffing resulting from: 1) HCEI Agreement<sup>1</sup> initiatives which require additional staffing and new organizations in several departments, 2) additional staffing and new groups for other organizational changes not related to the HCEI initiatives, 3) relocation of the Meter Engineering Division due to a water incursion problem in the basement of the Ward I Building, and 4) reassessing space requirements of other divisions due to growth. Additional office spaces are needed for offices, work stations, reception areas, conference rooms, training rooms, equipment

The HCEI Agreement was signed on October 20, 2008 by the Governor of the State of Hawaii, the Consumer Advocate, the State Department of Business, Economic Development and Tourism, and the Hawaiian Electric Companies.

and supplies storage area, and for certain groups, area to operate and test equipment and machinery.

#### 1) HCEI Initiatives

With respective to item 1, the additional headcounts resulting from HCEI initiatives are reflected in Faye Chiogioji's HECO T-15 update. The major organizational changes which necessitated additional office space requirements include:

- 1. A new Renewable Energy Power Purchase Division to manage the increasing number of renewable energy power purchase negotiations, which resulted in a net increase of two positions. HECO T-7 Update; HECO T-15 Update.
- 2. A new Renewable Energy Planning Division consisting of four positions to manage the increasing workload with integrating new renewable energy sources. HECO T-7 Update; HECO T-15 Update.
- 3. A new AMI Division consisting of six positions to execute and manage the Company's AMI implementation plan. HECO T-8 at 53-54; CA-IR-217 response at 1-3; HECO T-8 Update; HECO T-15 Update. (This division might grow to eight or ten positions in 2010 including supporting HELCO and MECO.)

#### 2) Other Organizational Changes

With respect to item number 2, the additional headcounts resulting from other organizational changes are also reflected in Faye Chiogioji's HECO T-15 update. The major organizational changes which necessitated additional office space requirements include:

- 1. A new Asset Management Division consisting of five positions to manage the Company's maintenance and replacement of its aging T&D assets. HECO T-8 Update; HECO T-15 Update.
- 2. A new Corporate Planning Department formed in August 2008 to oversee the Strategic Initiatives, Clean Energy Scenario Planning (which superseded the previous Integrated Resources Planning), and a new Enterprise Risk Management function. This resulted in a net addition of two positions. HECO T-11 Update; HECO T-15 Update.

#### 3) Meter Engineering Division

With respect to item 3, a water incursion problem in the basement of the Ward I Building has necessitated the planned relocation of the Meter Engineering Division to a new location. On-going water seepage through the concrete flooring is causing interruptions to the division's operations. The water source comes from an underground water flow which is difficult to remedy. Meter Engineering handles an extensive amount of equipment on a daily basis and will need an area free from water seepage problems. Since there was not a suitable location at Ward to relocate the operations, the Company signed a new lease on August 15, 2008 with Waterhouse, Inc. (Attachment 1) for 2,000 square feet located at 770 Kapiolani Blvd, Suites 105 and 106 (Waterhouse Building). This space, including the planned use of an existing lease (Suite 101 which is currently used as a classroom for various trainings, testings and meetings) is suitable for the Meter Division employees and some of their equipment, which are critically impacted by the water seepage. As the Waterhouse Building space is unable to accommodate all of the Meter Engineering Division's operational and storage requirements, the remaining equipment (such as power and current transformers and testing equipment) of the Meter Engineering Division will still remain in the basement until adequate space is available. Once the Meter Engineering Division personnel is relocated, HECO plans to convert the vacated space into training classrooms, which is not as severely affected by the water seepage problem. Even after the Ward basement is converted to classrooms, HECO plans to retain the training space at the Honolulu Club where the lease expires in 2012.

#### 4) Reassessment of Growth in Other Divisions

Lastly, with respect to item 4, HECO's facilities planning group is also continuously reassessing the amount of additional space needed to address the increased staffing and space requirements of other divisions within the Company, which entails determining the most effective and efficient office space layout to accommodate the growth in these divisions while minimizing costs and the impact of day to day operations. These efforts include (1) Mapping and Field Services Divisions do not have any office space for their planned new hires, (2) Customer Services does not have office space for new hires needed for CIS implementation, and (3) ITS Department will require 1,000 square feet of secured space to test, install, and maintain computer hardware during its planned computer Company-wide replacement project.

The Company is currently in negotiation to lease an additional 12,980 square feet at the American Savings Bank Tower ("ASBT"), 1001 Bishop Street, Suites 2970 and 2959; 7,134 square feet at the Central Pacific Plaza ("CPP"), 220 South King Street, Suites 600, 650, and 680; and 2,193 square feet at the Waterhouse Building, Suites 401, 402, and 403. As negotiations are not finalized, only proposals are available at the current time. Attachment 2 is the ASBT proposal, Attachment 3 is the CPP proposal, and Attachment 4 is the Waterhouse Building proposal. The additional office lease rentals are summarized as follows:

		Annual
	Ī	Lease Rent
Waterhouse Lease for 770 Kapiolani Blvd, Suites 105 and 106	\$	57,000
ASBT Lease for 1001 Bishop Street, Suites 2970 and 2959		470,000
CPP Lease for 220 South King Street, Suites 600, 650, and 680		255,000
Waterhouse Lease for 770 Kapiolani Blvd, Suites 401, 402 and 403		59,000
Total increase in Miscellaneous General Expenses	\$	841,000

The total additional office space of the above four leases is 24,307 square feet. The Company's facilities planning group is continuing negotiations of the three leases noted above as well as exploring other commercial office space availability. Concurrently, the facilities planning group is conducting space planning and analyses to determine the optimal movements of groups and realignment of existing spaces to meet operational and future growth requirements. Refer to pages 12-13 for an updated rent expense exhibit (revised HECO-1405).

#### ACCOUNT NO. 932 MAINTENANCE OF GENERAL PLANT UPDATE

The increase in Maintenance of General Plant is primarily related to the following changes in recurring maintenance and non-recurring maintenance projects in test year 2009:

Non-recurring:		
Ward parking structure ramp repairs - Diamond Head end	\$	(440,000)
Ward base yard project		525,000
Recurring:		
Check processing maintenance contract		25,000
Archiving machine maintenance contract	_	10,000
Total increase in Miscellaneous General Expenses, net	\$	120,000

Refer to page 19 for an updated maintenance of general plant exhibit (revised HECO-1412).

Ward Parking Structure Ramp Repairs – Diamond Head End

As discussed in the Company's response to CA-IR-156, due to the severity of the ramp problems and the criticalness of the ramp, the Ward parking structure ramp repairs on the Diamond Head end of the ramp ("Phase 2") was advanced from 2009 to 2008. Phase 2 commenced in August 2008. It is anticipated that approximately 70% of the work will be completed in 2008. Accordingly, \$440,000 of the original test year 2009 budget of \$628,000 was moved to 2008.

#### Ward Base Yard Project

As discussed in the Company's response to CA-IR-156, due to the advancement of Phase 2 of the Ward parking ramp project to commence in 2008, the Company reviewed and reprioritized its remaining non-recurring general maintenance projects. As a result, the Company plans to repair the concrete asphalt around the vicinity of the Company's Archer Lane Guard shack located at the Ward base yard in 2009. There is a significant amount of concrete asphalt cracking and damage in this area due to the high volume of traffic, and especially due to the large and heavy Company and vendor trucks that enter and exit from this location. The damage to the concrete asphalt is becoming a safety hazard for employees who park in the Company's adjacent Cooke Street lot and have to walk through this area. The design of the concrete asphalt repair will have to be able to structurally support the significant weight of the Company's trucks. Further, the design will include adding conduits to avoid future construction on the asphalt which compromises the integrity of the concrete slab. The total cost of this project is estimated at \$525,000 in the 2009 test year. Attachment 6 provides a breakdown of the significant costs for this project, such as concrete and duct work, which are primarily based on the scope of work and contractor estimates. Additional costs will include: outside contractor work for communications cabling, project management, building permitting fee, consultant fees, and relocation of security guards to a temporary location. The Company will update its estimates when the scope of work is determined and final contractor bids are obtained.

#### Check Processing and Archiving Maintenance Contracts

The check processing and archiving maintenance contracts relate to new equipment purchased by the Customer Services Department for the payment processing area. This system

gathers the data used to update customer balances, images checks, batches payment information and encodes and endorses the checks for same day deposit to the respective bank accounts. The total costs of these maintenance contracts are approximately \$35,000. The estimated maintenance costs of this system are based on vendor quotes contained in Attachment 7.

#### DEPRECIATION EXPENSE AND ACCUMULATED DEPRECIATION UPDATE

The Company decreased its test year 2009 estimate for depreciation expense by approximately \$217,000 and decreased its test year 2009 estimate for accumulated depreciation by approximately \$146,000. The decrease to the test year depreciation expense is primarily due to revised lower estimate of the Company's plant additions balance for 2008. Accordingly, the test year accumulated depreciation balance is lower than originally estimated primarily due to slightly lower depreciation accrual. The adjustments also reflect updates to the historical 5-year averages for retirements, cost of removal, and salvage which are used as a basis for HECO's most current 2009 test year estimates for retirements, cost of removal, and salvage. See pages 15-18 (revised HECO-1408, HECO-1409, HECO-1410 and HECO-1411) and pages 20-28 (revised HECO-WP-1401, HECO-WP-1402, HECO-WP-1403, HECO-WP-1404, and HECO-WP-1405) for supporting documentation.

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### Hawaiian Electric Company, Inc. Miscellaneous Administrative and General Expenses - REVISED Test Year 2009 (\$ in Thousands)

Line	Account	Notes	[A] 2009 Budget	[B] Budget Adj	[C] Norm	[D]=[A]+[B]+[C] 2009 TY Estimate	[E] RATE CASE UPDATE	[D]+[E] REVISED 2009 TY ESTIMATE
	928 Regulatory Commission Expense:							
1	Non-Labor	(1)	760		(320)	440		440
2	Total 928		760		(320)	440		440
	9301 Institutional/Goodwill Advertising Expense							
3	Labor		14	-		14		14
4	Non-Labor		22	-		22		22
5	Total 9301		36	-	-	36		36
	9302 Miscellaneous General Expenses							
6	Labor	(2)	316	(101)	-	215		215
7	Non-Labor	(3)	3,888	(246)	-	3,642	447	4,089
8	Total 9302		4,204	(347)		3,857	447	4,305
	931 Rents Expense							
9	Non-Labor	(4)	3,026	36	-	3,062	841	3,903
10	Total 931		3,026	36	-	3,062	841	3,903
	932 Administrative and General Maintenance							
11	Labor	(5)	195	52		247		247
12	Non-Labor	(5)	398	1,108	(188)	1,318	120	1,438
13	Total 932		593	1,160	(188)	1,565	120	1,685
	Total Misc Administrative and General Expenses		8,619	849	(508)	8,960	1,408	10,369

Note: Numbers may not total exactly due to rounding.

Note (1): Budget adjustment to normalize 2009 rate case expenses over 2 year period (see HECO-1403).

Note (2): Budget adjustment to remove costs for 1) Aloha United Way and Community Action Group activities amounting to \$7K, 2) overstatement of budgeted labor hours amounting to \$8K, and 3) labor related to the air and fish environmental monitoring programs amounting to \$86K. See HECO-1404, page 2 for details of these budget adjustments.

Note (3): Budget adjustment to 1) reclassify nonlabor costs related to the air and fish environmental monitoring programs amounting to \$96K (See HECO-1404 page 2), 2) remove portion of EEI dues attributed to government lobbying and other activities amounting to \$118K (See HECO-1404 page 4), 3) decrease intercompany BOD fees of \$104K (See HECO T-14 page 13), 4) exclude restricted stock expenses of \$3K (See HECO T-14 page 13), 5) increase R&D estimate by \$26K (See HECO T-14 page 31) and 6) increase R&D estimate by \$49K due to revised EPRI dues allocation (See HECO-1406).

Note (4): Budget adjustment to increase Central Pacific Plaza's Suite 1250/1270 lease rents and ASB Tower Training Room allocated charges, by \$21,000 and \$15,000, respectively. See HECO-1405 for details of these budget adjustments.

Note (5): Budget adjustments to increase Administrative and General Maintenance due to reclassifications of recurring maintenance work amounting to \$88K and non-recurring maintenance projects amounting to \$1.072K, offset by a normalization adjustment for non-recurring maintenance expense projects amounting to \$188K (see HECO-1412).

#### RATE CASE UPDATE SOURCE:

Pages 11, 12 and 19 for Column E, NARUC 9302, 931 and 932, respectively.

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## Hawaiian Electric Company, Inc. Account 9302 - Miscellaneous General Expenses - REVISED Test Year 2009 Estimate (\$\sin Thousands)

	TY 2009	RATE CASE UPDATE	RE	VISED TY 2009
Research and Development Note (1)	\$ 2,603	\$ 447	\$	3,050
Community Service Activities	361	-		361
Company Membership Dues	263	-		263
Ellipse Software Maintenance Fees	117	-		117
Board of Directors' Expenses	514	-		514
Total 2009 Test Year Miscellaneous General Expenses - REVISED	\$ 3,857	\$ 447	\$	4,305

Note: Numbers may not total exactly due to rounding.

#### RATE CASE UPDATE:

Note (1): Refer to the narrative portion of this update testimony and page 14, for a revised exhibit of HECO-1406, for more information regarding the increase in costs.

Hawaiian Electric Company, Inc. Account 931 - Rent Expense - REVISED Test Year 2009 Estimate

Reference		See HECO-WP-1410.	2007 TY Rate Case, CA-IR-2 HECO T-13, Attachment 11-B	2007 TY Rate Case, CA-IR-2 HECO T-13, Attachment 11-C	2007 TY Rate Case, CA-IR-2 HECO T-13, Attachment 11-D.	2007 TY Rate Case, CA-IR-2 HECO T-13, Attachment 11-E.	Note (2)	See HECO-WP-1411.	2007 TY Rate Case, CA-IR-2 HECO T-13, Attachment 11-G.	2007 TY Rate Case, CA-IR-2 HECO T-13, Attachment 11-H.	2007 TY Rate Case, CA-IR-299(c) HECO T-13, Attachment 3.	See HECO-WP-1412.	2007 TY Rate Case, CA-IR-299(c) HECO T-13, Attachment 4.	2007 TY Rate Case, CA-IR-299(c) HECO T-13, Attachment 6.		2007 TY Rate Case, CA-IR-2 HECO T-13, Attachment 11	See HECO-WP-1413.	Note (3)	2007 TY Rate Case, CA-IR-2 HECO T-13, Attachment 11-N.	See HECO-WP-1414.	2007 TY Rate Case, CA-IR-299(c) HECO T-13, Attachment 8.	2007 TY Rate Case, CA-IR-299(c) HECO T-13, Attachment 8.	See HECO-WP-1415.	2007 17 Kate Case, CA-IK-2 HECO 1-13, Attachment 11-K.				RATE CASE UPDATE HECO 1-14 Attachment 4	RATE CASE UPDATE HECO T-14 Attachment 3, pg. 1.	
[h]=[e]+ [f]+[g] Annual Rent TY 2007 (\$ 000s)		\$ 249	132	130	93	56	21	303	82	36	22	80	91	127	1,394	818	61	15	475	85	83	4 ;	47	32	\$ 3,062		57	29	255	\$ 3,903
[g]=([e]+[f])x (4.712%) Annual General Excise Tax		\$ 11,205	5,962	5,864	4,202	1,184		13,629	3,686	1,642	1,005	3,614	4,075	5,707		36,822			21,387	4,134	3,734	1,779	2,135	•						•
[f]=[a]x note(1) Est RPT Credit	Note (1)	\$ (18,157)	(10,775)	(10,830)	(6,861)	(3,819)		(22,944)	(6,663)	(2,968)	(1,749)	(5,857)	(260,7)	(10,314)		ì			i		(2,777)	(1,496)	(1,625)							
[e]=[c]+[d] Annual Base & CAM Rent		\$ 255,946	137,310	135,287	66,039	28,956		312,185	84,898	37,821	23,070	82,564	93,583	131,428		781,456			453,876	87,730	82,015	44,184	46,929							
[d]=[a]x note(1) Est Annual CAM	Note (1)	\$ 103,723	61,554	61,868	39,193	21,815		131,067	38,060	16,955	9,993	33,460	40,531	58,919		ì			215,496		35,740	19,254	20,923							
[c]=[a]x[b] Annual Base Rent	Note (2)	\$ 152,223	75,756	73,418	56,846	7,141		181,118	46,838	20,866	13,077	49,105	53,052	72,509		781,456			238,380	87,730	46,275	24,930	26,006	(no GET)						
[b] Monthly Rent per Sq Ft \$		1.66	1.40	1.35	1.65	1.35		1.55	1.35	1.40	1.49	1.66	1.49	1.40		1.11			1.25	2.87	1.25	1.25	1.10	onts of \$7,925						
[a] Sq Ft		7,598 \$	4,509	4,532	2,871	1,598		9,601	2,788	1,242	732	2,451	2,969	4,316		58,313	(3)		15,892	2,544	3,085	1,662	1,806	Quarterly payments of \$7,925 (no GET)			901	and 403	6067	0
EXISTING LEASES	Central Pacific Plaza (CPD):	Suite 700	Suite 1010	Suite 1020/1025/1075	Suite 1201/1212	Suite 1250/1270	Adjustment - CPP 1250/1270	Suite 1300	Suite 1425	Suite 1480	Suite 1515	Suite 1520/1530	Suite 1570	Suite 1710/1750/1760	Total CPP	King Street Building	ASB Tower - Training Rooms Note (3)	Adjustment - ASB Training Rooms	Pauahi Tower	Honolulu Club	Waterhouse - Suite 506	Waterhouse - Suite 404	Waterhouse - Suite 101	Walau Vladuct	Total TY 2009 Rent	RATE CASE UPDATE:	Waterhouse - Suites 105 and 106	Waterhouse - Suites 401, 402 and 403	ASD 10Wer - Sulles 2970 and 2939 CPP - Sulles 600, 650 and 680	Total TY 2009 Rent - REVISED

## Note Explanations:

Note: Numbers may not add exactly due to rounding.

For CPP leases, estimated common area maintenance (CAM) costs and real property tax (RPT) credits were estimated based on estimated 2008 figures as follows: Ξ

		CAM		RPT
CPP 2008 Estimate	49	3,087,587	49	540,495
mated Annual Increase (3%)		1.03		1.03
stimated CPP 2009 CAM/RPT	49	3,180,215	49	556,710
tal CPP Sq Ft (Common Interest)		232,959		232,959
Months		12		12
Est Monthly 2009 \$ per sq ft	49	1.14	s	0.20

For Pauahi Tower lease, CAM costs were estimated based on an estimated CAM rate of \$1.0977 per sq ft and escalated 3%. RPT credit is included in the CAM costs.

See HECO-WP-1417.

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See HECO-WP-1416.

Hawaiian Electric Company, Inc. Account 931 - Rent Expense - REVISED Test Year 2009 Estimate

# Note Explanations - continued

For Waterhouse leases, CAM costs were estimated based on actual 2007 CAM rate of \$.91 per sq ft and escalated 3% anually to 2008 and 2009. For RPT credits, assumed \$.15 per sq ft for 6 months (7/09-1/2/09 for suites 404/506 and 1/09-6/09 for suite 101), based on 2008 RPT credits escalated by 3% and based on the timing of the filing and estimated receipt of the RPT exemption.

For Honolulu Club lease, CAM and RPT credits are included in the base rent.

(2) Annual base rents are based on existing leases, except as adjusted based on lease terms and/or assumptions below:

CPP 1201/1212:

The current lease expires August 31, 2008 and is currently being negotiated. For the purposes of the 2009 budget, assumed a \$1.65 base rate per sq. ft., similar to the CPP 700 lease which was recently negotiated and executed in 2007.

## P 1250/1270:

The calculation of the 2009 lease is incorrect. The total 2009 annual BASE lease expense for these suites should be \$26,767 in accordance with the existing lease agreement which expires January 31, 2010. Accordingly, the total annual lease expense including CAM, GET and RPT credit should be \$47,000, an increase of \$21,000 from the current 2009 budgeted amount. Therefore, total rent expense will be adjusted at the next opportunity to determine revenue requirements.

## CPP 1425:

The current lease expires October 31, 2009. For the purposes of the 2009 budget, assumed a \$1.65 base rate per sq. ft., similar to the CPP 700 lease which was recently negotiated and executed in 2007, beginning November 2009.

# Waterhouse 506 and 404:

The current lease expires November 30, 2008 and is currently being negotiated. For the purposes of the 2009 budget assumed a \$1.25 base rate per sq. ft. based on initial renewal discussions.

## Waterhouse 101:

The current elase expires April 30, 2009. For the purposes of the 2009 budget, assumed a \$1.25 base rate per sq. ft. based on initial renewal discussions of Waterhouse 506 and 404.

(3) Budgeted amount is based on an early calculation which has since been updated. The updated amount is \$76,000, approximately \$15,000 more than originally budgeted. Updated amount is based on additional shared costs in addition to rent (e.g., insurance and overhead). Therefore, total ASB training room rent will be adjusted at the next opportunity to determine revenue requirements.

Reference - continued:

See HECO-WP-1418.

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## Hawaiian Electric Company, Inc. Research and Development (R&D) Expenses - REVISED Test Year 2009 (\$ in Thousands)

			Y 2009		E CASE DATE	RE	VISED TY 2009
NARUC 9302 R&D Expenses:							
EPRI Dues - HECO's Portion - calculation below		\$	1,657	\$	-	\$	1,657
Develop & Demonstrate New Technology	Note (4)		424		197		621
Other Long-Term R&D Strategies:							-
Oahu Electric System Analysis	Note (5)		352		325		677
Maui Electric System Analysis Phase 2	Note (5)		75		(75)		-
Biofuel Agriculture Crop Research Phase 3			50		•		50
Other long-term R&D activities			45		~		45
Total Account 9302 R&D Expenses		\$	2,603	\$	447	\$	3,050
NARUC 549 R&D Expenses: Biofuel Cofiring Project		\$	649	\$		\$	649
Technology Division Labor and Labor-Related Costs	Note (3)	Φ	132	Ψ	•	Φ	132
Renewable Energy Recurring Activities	Mote (3)		34		•		34
Other Production R&D Costs			84		•		
Other Production R&D Costs			04				84
Total Account 549 R&D Expenses		\$	899	\$	•	\$	899
Various NARUC Operation and A&G R&D Expenses		\$	31	\$	•	\$	31
EPRI Dues - HECO's Portion:							
Total Estimated EPRI Dues				\$	1,608	[b]	
Budget adjustment					49		[a]-[b]
Total 2009 Company-wide EPRI Dues	Note (1)	\$	2,085				
HECO's Portion - UPDATED	Note (2)		79.435%				
Total TY 2009 Estimated EPRI Dues				\$	1,657	[a]	

Note: Numbers may not total exactly due to rounding.

Note (1): Amount represents the fixed annual EPRI membership dues per the 5-year EPRI Membership Agreement between HECO and EPRI expiring December 31, 2011.

Note (2): HECO's portion of the total EPRI dues is based on the below allocation:

HECO TY 2007 Docket No. 2006-0386, Interim D&O No. 23749	3,174	79.435%
HELCO TY 2006 Docket No. 05-0315, (HELCO T-9, pg. 75)	324	8.109%
MECO TY 2007 Docket No. 2006-0387, (MECO T-9, pg. 68)	498	12.456%
Total	3,996	

Note (3): Amount represents the labor and labor-related costs of HECO's Technology Division, which is comprised of a Director, Senior Energy Specialist and Project Aide, whose work cannot be directly attributable to specific projects.

#### RATE CASE UPDATE:

Note (4): Refer to the Company's response to CA-IR-158 for more information on the proposed increase of this proceeding.

Note (5): Refer to the narrative portion of the this update and the Company's response to CA-IR-161 for more information on the proposed changes. Also, refer to Attachment 5 for the Oahu Electric System Analysis study executed consultant contract.

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HECO-1408 DOCKET NO. 2008-0083 PAGE 1 OF 1

#### Hawaiian Electric Company, Inc. Depreciation and Amortization Expense For Years 2003 - 2009 (\$ in Thousands)

		Decembed	Decembed	Decoded	December	Decorded	(A)	(B) Test Year
Line		Recorded 2003	Recorded 2004	Recorded 2005	Recorded 2006	Recorded 2007	Estimate 2008	Estimate 2009
1	Depreciation Accrual	75,603	78,314	79,826	84,358	88,778	91,663	92,979
2	Less: Depreciation on vehicles	(1,320)	(1,473)	(1,774)	(1,812)	(1,790)	(1,978)	(2,155)
3	Amortization of CIAC	(6,924)	(7,287)	(7,484)	(8,056)	(8,488)	(9,009)	(9,383)
4	Amortization of Federal ITC - Note (1)	(1,020)	(976)	(905)	(847)	(764)	(719)	(644)
5	Amortization of SFAS 109 reg asset- Note (1)	604	697	814	945	1,021	2,033	2,169
6	Depreciation Expense	66,943	69,275	70,477	74,588	78,757	81,990	82,966

Note (1): Amortization of Federal ITC is included in depreciation expense in accordance with the SFAS 109 method of accounting for income taxes as described in Mr. Lon Okada's testimony in HECO T-16.

#### Source:

See HECO-1410 for Columns A & B, lines 1 and 2. See HECO-WP-1402 for Columns A & B, line 3.

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HECO-1409 DOCKET NO. 2008-0083 PAGE 1 OF 1

#### Hawaiian Electric Company, Inc. Accumulated Depreciation For Years 2003 - 2009 (\$ in Thousands)

							(A)	(B) Test Year
Line		Recorded 2003	Recorded 2004	Recorded 2005	Recorded 2006	Recorded 2007	Estimate 2008	Estimate 2009
	Acc Dep Beg Bal at							
1	January 1	877,401	939,595	988,061	1,050,526	1,122,193	1,174,518	1,242,678
	Plus:							
2	Depreciation Accrual	75,603	78,314	79,769	84,358	88,778	91,663	92,979
3	Salvage	297	279	170	221	198	260	277
	Less:							
4	Retirements - Note (2)	(9,665)	(25,354)	(10,273)	(7,217)	(29,512)	(17,215)	(16,063)
5	Cost of Removal	(4,041)	(4,773)	(7,138)	(5,909)	(7,136)	(6,548)	(6,770)
6	Adjustments - Note (1)			(63)	214	(3)		
	Acc Dep End Bal at							
7	December 31	939,595	988,061	1,050,526	1,122,193	1,174,518	1,242,678	1,313,101

#### 2008 UPDATE:

Note (1): Reclassification of accumulated depreciation for E-business from utility to non-utility (approximately \$74K, net) offset by entry to establish ARO accumulated depreciation (approximately \$11K) in 2005. Reclassification of accumulated depreciation for the Interisland Communication System from non-utility to utility (approximately \$214K) in 2006. Reversal of depreciation for hydrogen cylinders which were should have been expensed in 2007.

Note (2): Effective in 2004, retirements include retirement of assets subject to vintage amortization accounting.

#### Source:

See HECO-WP-1401 for Columns A & B, lines 2 and 4. See HECO-WP-1403 for Columns A & B, lines 3 and 5.

RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 PAGE 17 OF 28

HECO-1410 DOCKET NO. 2008-0083 PAGE 1 OF 1

#### Hawaiian Electric Company, Inc. Depreciation and Amortization Accrual 2008-2009 (\$ in Thousands)

		(A) Depreciable	(B)	(C) Estimate	(D) Depreciable	(E)	(F) TY Estimate
		Plant at	Composite	2008	Plant at	Composite	2009
Line	Plant Group	1/1/08	Rate	Dep Accr	1/1/09	Rate	Dep Accr
1	Production	567,173	1.6891%	9,580	589,962	1.6872%	9,954
2	Transmission	581,274	2.9119%	16,926	596,329	2.9118%	17,364
3	Distribution - Note (2)	1,147,216	4.2988%	49,317	1,185,587	4.2987%	50,965
4	General - Note (1)	173,199	8.0035%	13,862	174,647	7.1808%	12,541
5	Vehicles	27,214	7.2683%	1,978	29,638	7.2711%	2,155
6	TOTAL	2,496,076	3.6723%	91,663	2,576,163	3.6092%	92,979

Note (1): General 2008 and 2009 Dep Accr includes depreciation of leasehold improvements of \$67,000. Also, the depreciation accrual includes net unrecovered amortization of \$3,298,000 in 2008 and \$1,924,000 in 2009.

Note (2): Distribution depreciable plant includes ARO asset amounting to \$14,000 and \$13,000 at 1/1/08 and 1/1/09, respectively.

Note (3): Note that the depreciable plant balances above exclude land.

#### Source:

See HECO-WP-1401 for Columns A, C, D and F.

RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 PAGE 18 OF 28

HECO-1411 DOCKET NO. 2008-0083 PAGE 1 OF 1

## Hawaiian Electric Company, Inc. Summary of Plant Balances, Accumulated Depreciation and Annual Dep and Amortization Accruals For Years 2003 - 2009 (\$ in Thousands)

		[A]	[B] Depr	[C]=[B]/[A]	[D]	[E]=[D]/[A]
		Dep Plant	Accrual	As %	Acc Depr	As %
Line	Year	at Beg of Yr	Note (1)	of Plant	at Beg of Yr	of Plant
1	2003	2,024,963	75,603	3.73%	877,401	43.33%
2	2004	2,085,866	78,314	3.75%	939,595	45.05%
3	2005	2,204,392	79,769	3.62%	988,061	44.82%
4	2006	2,296,683	84,358	3.67%	1,050,526	45.74%
5	2007	2,420,391	88,778	3.67%	1,122,193	46.36%
6	Estimate 2008	2,496,076	91,663	3.67%	1,174,518	47.05%
7	TY Estimate 2009	2,576,163	92,979	3.61%	1,242,678	48.24%

Note (1): Includes amortization and depreciation on leasehold improvements and vehicles

#### Source:

See HECO -WP-1401 for Columns A, B and D, lines 6 and 7.

RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 PAGE 19 OF 28

HECO-1412 DOCKET NO. 2008-0083 PAGE 1 OF 1

## Hawaiian Electric Company, Inc. Account 932 - Maintenance of General Plant - REVISED Test Year 2009 Estimate (\$ in Thousands)

	TY 2009			E CASE DATE	 ISED 2009 TY EST
Total estimated annual recurring maintenance (Note 1)	\$	681	\$	35	\$ 716
Total estimated non-recurring maintenance (Note 2) Ward parking structure ramp repairs - Ewa end Ward parking structure ramp repairs - Diamond Head end Ward Baseyard project Total 2009 non-recurring maintenance projects	\$	444 628 - 1,072 [a]		(440) 525 85	\$ 444 188 525 1,157
Non-recurring maintenance normalization adjustment (Note 3)		(188) [d]-[a]			(188)
Total 2009 Test Year Maintenance of General Plant	\$	1,565	\$	120	\$ 1,685

Note: Numbers may not total exactly due to rounding.

Note (1): The estimated recurring maintenance amount includes an upward budget adjustment of \$88,000 related primarily to King Street building repairs and maintenance work. This adjustment amount was originally included in account 920/921 but reclassified in accordance with NARUC account guidelines. Refer to corresponding deduction adjustment at Ms Patsy Nanbu's testimony at HECO T-11.

Note (2): The original budget for account 932 did not include these 2009 budgeted Ward parking structure ramp repairs. These amounts were reclassified from account 920/921 in accordance with NARUC account guidelines. Refer to corresponding deduction adjustment at Ms Patsy Nanbu's testimony at HECO T-11.

Note (3): The calculation of a normalized non-recurring general maintenance amount is based on a 3-year average of on-going and budgeted non-recurring general maintenance projects for the 2009 test year estimate. Since the majority of the non-recurring maintenance projects is nonlabor, the normalization adjustment will be reflected in nonlabor at HECO-1401. Calculation of the normalized non-recurring maintenance is as follows:

#### 2008 Non-recurring projects

Ward parking structure covered level improvements	\$ 254	
Ward parking structure ramp wall repairs	626	
Total 2008 non-recurring maintenance projects	880	[b]
2010 Non-recurring projects		
Ward cafeteria roof improvements	\$ 85	
Ward parking structure stairwell improvements	177	
Ward fire doors replacement	20	
Ward cafeteria deck coating	7	
Ward parking structure waterproof	60	
King St. building paint/waterproof	351	
Total 2010 non-recurring maintenance projects	700	[c]

Total Normalized Non-recurring projects (3-yr avg, 2008-2010) 884 [d]=([a]+[b]+[c])/3

#### RATE CASE UPDATE:

Refer to the narrative portion of this update for an overall summary of these adjustments. Also, refer to 1) Company's response to CA-IR-156 for information on the ward parking structure - Diamond Head end project adjustment, 2) Attachment 6 for the Ward Base Yard project, and 3) Attachment 7 for the additional check processing and archiving maintenance contracts.

RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 PAGE 20 OF 28

HECO-WP-1401 DOCKET NO. 2008-0083 PAGE 1 OF 3

### Hawaiian Electric Company, Inc. Plant Roll-Forward and Book Depreciation & Amortization 2008 and 2009 (\$ in Thousands)

	Estimated Plant a/o 12/31/2008	2008 Depr & Amort	Estimated Plant a/o 12/31/2009	Estimated TY 2009 Depr & Amort
Production		2 op		
Beginning Balance	\$ 567,173		\$ 589,962	
Add: Additions	26,277		182,935	
Less: Retirements	3,488		3,695	
Ending Balance	589,962	\$ 9,580	769,202	\$ 9,954
A D 1 (V) - COLOR - CO				
Transmission				
Beginning Balance	581,274		596,329	
Add: Additions	16,363		25,410	
Less: Retirements	1,308	40,000	1,343	47.004
Ending Balance	596,329	16,926	620,396	17,364
Distribution				
Beginning Balance	1,147,202		1,185,574	
Add: Additions	43,065		61,237	
Less: Retirements	4,693		4,850	
Ending Balance	1,185,574	49,317	1,241,961	50,965
General (Excl LH Improvements)	170 100		474.047	
Beginning Balance	173,199		174,647	
Add: Additions	7,781		12,918	
Less: Retirements Ending Balance	6,333 174,647	10,498	4,659 182,906	10,549
Ending balance	174,047	10,490	102,900	10,549
Vehicles				
Beginning Balance	27,214		29,638	
Add: Additions	3,816		3,151	
Less: Retirements	1,392		1,515	
Ending Balance	29,638	1,978	31,274	2,155
180 to 1 (8) ( 1 o 1)				
ARO Assets (Distribution)			40	
Beginning Balance Add: Additions	14		13	
Less: Retirements	1		1	
Ending Balance	13		12	
Litting balance	13	-	12	
Total - Excl. Land				
Beginning Balance	2,496,076		2,576,163	
Add: Additions	97,302		285,651	
Less: Retirements	17,215		16,063	
Ending Balance	2,576,163	88,299	2,845,751	90,988
Land (Incl LH Improvements)				
Beginning Balance	33,553		39,774	
Add: Additions	6,221		2,684	
Less: Retirements	-		2,001	
Ending Balance	39,774	67	42,458	67
Total - Incl Land				
Beginning Balance	2,529,629		2,615,937	
Add: Additions	103,523		288,335	
Less: Retirements	17,215	-	16,063	
Ending Balance	\$ 2,615,937		\$ 2,888,209	
Additional Depreciation & Amortization -				
Net Unrecovered Amortization - Note (2)		3,297		1,924
District Control of the Control of Control o			-	
Total Depreciation & Amortization		\$ 91,663		\$ 92,979
Account total December Comment				
Accumulated Depreciation Summary	6 4474.540		6 4040.070	
Beginning Balance	\$ 1,174,518		\$ 1,242,678	
Add: Depreciation Add: Estimated Salvage per HECO-WP-1403	91,663 260		92,979 277	
Less: Retirements per HECO-WP-1403	17,215		16,063	
Less: Removal Costs per HECO-WP-1403	6,548		6,770	
Ending Balance	\$ 1,242,678	-	\$ 1,313,101	
7				

Note: Numbers may not total exactly due to rounding.

Note (1): Details provided on pages 2 and 3.

Note (2): Amount represents the annual amount for a five-year recovery of net unrecovered amortization as approved by the Commission in Decision and Order No. 21331, Docket No. 02-0391, dated September 3, 2004.

RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 PAGE 21 OF 28

HECO-WP-1401 DOCKET NO. 2008-0083 PAGE 2 OF 3

## Hawaiian Electric Company, Inc. Plant Roll-Forward and Book Depreciation 2008 and 2009 (\$ in Thousands)

	[A]			[B]	[A] x Beg Bal [B]
Deaduction	Note (1) 2000 Depr Study Rates	Estimated Plant a/o 12/31/2008	2008 Depr	Estimated Plant a/o 12/31/2009	Estimated TY 2009 Depr
Production Beginning Balance		\$ 562,075		\$ 584,989	
Add: Additions		26,277		182,935	
Less: Retirements	0.046504	3,363 584,989	¢ 0.335	3,500 764,424	. 0 706
Ending Balance	0.016591	564,969	\$ 9,325	764,424	\$ 9,706
Transmission					
Beginning Balance		581,274		596,329	
Add: Additions Less: Retirements		16,363 1,308		25,410 1,343	
Ending Balance	0.029118	596,329	16,926	620,396	17,364
	0.020110	000,020	10,020	020,000	,
Distribution		4 4 4 7 000		4 405 574	
Beginning Balance Add: Additions		1,147,202		1,185,574	
Less: Retirements		43,065 4,693		61,237 4,850	
Ending Balance	0.042988	1,185,574	49,317	1,241,961	50,965
					•
General (Excl LH Improvements)		134,352		136,464	
Beginning Balance Add: Additions		4,017		8,392	
Less: Retirements		1,905		1,935	
Ending Balance	0.052566	136,464	7,062	142,921	7,172
Vehicles					
Beginning Balance		27,214		29,638	
Add: Additions		3,816		3,151	
Less: Retirements		1,392		1,515	_
Ending Balance	0.072700	29,638	1,978	31,274	2,155
Total - Excl. Land					
Beginning Balance		2,452,117		2,532,994	
Add: Additions		93,538		281,125	
Less: Retirements		12,661		13,143	
Ending Balance		2,532,994	84,608	2,800,976	87,362
Land (Incl. LH Improvements)					
Beginning Balance		33,553		39,774	
Add: Additions		6,221		2,684	
Less: Retirements Ending Balance		39,774	. 67	42,458	67
		33,114	07	42,430	07
Total - Incl Land		0.405.075		0 ==0 ===	
Beginning Balance Add: Additions		2,485,670		2,572,768	
Less: Retirements		99,759 12,661		283,809 13,143	
Ending Balance		\$ 2,572,768		\$ 2,843,434	
			\$ 84,675	_	\$ 87,429
Total Depreciation		9	φ 04,075	=	\$ 87,429

Note: Numbers may not total exactly due to rounding.

Note (1): See HECO-WP-1405 for derivation of the composite rates.

RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 PAGE 22 OF 28

HECO-WP-1401 DOCKET NO. 2008-0083 PAGE 3 OF 3

## Hawaiian Electric Company, Inc. Plant Roll-Forward and Book Amortization 2008 and 2009 (\$ in Thousands)

	[A] Note (1) 2000 Depr Study Rates	Estima Plant a 12/31/2	1/0		2008 Amort		[B] nated Plant 12/31/2009	E	[A] x eg Bal [B] Estimated TY 2009 Amort
Production Beginning Balance Add: Additions		\$ 5	,098			\$	4,973		
Less: Retirements	0.050000		125	•	055		195	•	240
Ending Balance	0.050000		,973	\$	255		4,778	\$	249
General Beginning Balance		20	3,847				38,183		
Add: Additions			3,764				4,526		
Less: Retirements			,428				2,724		
Ending Balance	0.088445	38	,183		3,436		39,985		3,377
Total									
Beginning Balance Add: Additions			3,945				43,156		
Less: Retirements			3,764 3,553				4,526 2,919		
Ending Balance			3,156		3,691	\$	44,763		3,626
Additional Amortization - Net Unrecovered Amortization					3,297			_	1,924
Total Amortization				\$	6,988	ı		\$	5,550

Note: Numbers may not total exactly due to rounding.

Note (1): See HECO-WP-1405 for derivation of the composite rates.

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HECO -WP-1402 DOCKET NO. 2008-0083 PAGE 1 OF 1

#### Hawaiian Electric Company, Inc. Amortization of CIAC Estimated 2008 and 2009 (\$ in Thousands)

			Recorded 2007		Estimated 2008			Test Year Estimate 2009
Amortization through 2006			\$	8,488	\$	8,315	\$	8,263
Amortization of 2007 Vintage Receipts Plus: Transfers from Cust Adv Base for Amortization Divided by 30 Subtotal	\$ \$	20,480 341 20,821 30 694				694		694
Amortization of 2008 Vintage Receipts Plus: Transfers from Cust Adv Base for Amortization Divided by 30 Subtotal	\$ \$	12,749 19 12,768 30 426						426
Annual Amortization of CIAC					\$	9,009	\$	9,383

RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 PAGE 24 OF 28

HECO-WP-1403 DOCKET NO. 2008-0083 PAGE 1 OF 2

## Hawaiian Electric Company, Inc. Projected Retirements, Cost of Removal and Gross Salvage for Depreciable Plant Recorded 2003 to 2007 (\$ in Thousands)

	1	Recorded	F	Recorded	F	Recorded		Recorded		Recorded		Total
		2003		2004		2005		2006		2007		Recorded
		W 131										
Depr. Plant Balances - I	_					=10 ==0			•	550.004	•	0.400.000
Production	\$		\$	457,074	\$	516,558	\$	529,205	\$	552,031	\$	2,498,396
Transmission		522,153		526,540		539,592		550,826		576,639		2,715,751
Distribution		913,623		947,610		998,044		1,052,098		1,097,284		5,008,659
General		121,084		130,099		125,796		146,552		177,108 24,622		700,639 123,065
Vehicles Total	\$	24,575 2,024,963	\$	24,542 2,085,865	\$	24,402 2,204,392	\$	24,924 2,303,605	\$	2,427,684	\$	11,046,509
Iotai	Φ	2,024,303	Φ	2,005,005	Φ	2,204,392	Φ	2,303,003	Φ	2,427,004	Φ	11,040,309
Retirements [b]												
Production	\$	292	\$	437	\$	1,033	\$	149	\$	13,036	\$	14,948
Transmission		2,213		859		805		615		1,622		6,114
Distribution		3,209		4,560		4,166		3,952		4,604		20,491
General		1,864		1,783		793		-		5,496		9,936
Vehicles		2,087		2,009		994		793		408		6,291
Total	\$	9,665	\$	9,647	\$	7,792	\$	5,509	\$	25,166	\$	57,779
Percentages of Book Re	etire	ments to Beg	ginni	ng Plant Bal	lanc	es [b] / [a]						
Production		0.000659		0.000956		0.002001		0.000282		0.023615		0.005983
Transmission		0.004238		0.001631		0.001493		0.001117		0.002813		0.002251
Distribution		0.003512		0.004812		0.004174		0.003756		0.004196		0.004091
General		0.015397		0.013702		0.006301		0.000000		0.031032		0.014181
Vehicles		0.084910		0.081864		0.040752		0.031817		0.016571		0.051121
Coat of Domestal [a]												
Cost of Removal [c] Production	\$	614	\$	342	\$	640	\$	248	\$	3,552	•	5,397
Transmission	Ф	694	Ф	896	Ф	953	Ф		Ф	719	Ф	4,293
Distribution		2,787		3,406		5,539		1,031 4,567		2,721		19,020
General				128		7		63		2,721		19,020
Vehicles		(56) 2		120		,		- 03		144		146
Total	\$	4,041	\$	4,772	\$	7,138	\$	5,909	\$		\$	28,997
Total	Ψ	4,041	Ψ	4,112	Ψ	7,130	Ψ	3,303	Ψ	7,100	Ψ	20,337
Percentages of Remova	al Co	st to Retirer	nent	s [c] / [b]								
Production		2.101125		0.782806		0.619564		1.664430		0.272476		0.361034
Transmission		0.313670		1.043709		1.182786		1.676423		0.443280		0.702160
Distribution		0.868474		0.746919		1.329621		1.155617		0.591008		0.928212
General		(0.030194)		0.071772		0.008406		#DIV/0!		0.000000		0.014223
Vehicles		0.001024		0.000000		0.000000		0.000000		0.352941		0.023229
Gross Salvage [d]												
Production	\$	6	\$	-	\$	-	\$	-	\$	-	\$	6
Transmission				-				-		-		-
Distribution		12		69		85		135		167		469
General		8		-		-		1		25		34
Vehicles		270		209		85		85		6		656
Total	\$	297	\$	279	\$	170	\$	221	\$	198	\$	1,165
Percentages of Green S	alve	age to Detice	mor	to [d] / [h]								
Percentages of Gross S Production	aiva		nen	0.000000		0.000000		0.000000		0.000000		0.000406
Transmission		0.020752				0.000000		0.000000		0.000000		0.000406
Distribution		0.003808		0.000000		0.000000		0.000000 0.034160				0.000000
General		0.003808		0.015239		0.020398		#DIV/0!		0.036273 0.004549		0.022873 0.003436
Vehicles		0.129487		0.104185		0.085772		0.107188		0.004549		0.104242
V SI IICIOS		0.123407		0.104103		0.003/12		0.107 100		0.014700		0.104242

RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 PAGE 25 OF 28

HECO-WP-1403 DOCKET NO. 2008-0083 PAGE 2 OF 2

## Hawaiian Electric Company, Inc. Projected Retirements, Cost of Removal and Gross Salvage for Depreciable Plant Estimated 2008 to 2009 (\$ in Thousands)

		Estimated 2008		Test Year Estimate 2009			
Depr Plant Balance	- Beginn	ing of the Ye	ear				
Production	\$	562,075	\$	584,989			
Transmission		581,274		596,329			
Distribution		1,147,202		1,185,574			
General		134,353		136,464			
Vehicles		27,214		29,638			
Total	\$	2,452,118	\$	2,532,994			
Retirements							
Production	\$	3,363	\$	3,500			
Transmission		1,308		1,343			
Distribution		4,693		4,850			
General		1,905		1,935			
Vehicles		1,391		1,515			
Total	\$	12,661	\$	13,143			

Cost of Removal		
Production	\$ 1,214	\$ 1,263
Transmission	919	943
Distribution	4,356	4,502
General	27	28
Vehicles	32	35
Total	\$ 6,548	\$ 6,770

Gross Salvage		
Production	\$ 1	\$ 1
Transmission	0	0
Distribution	107	111
General	7	7
Vehicles	145	158
Total	\$ 260	\$ 277

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## Hawaiian Electric Company, Inc. Estimated Accrual for Regulatory Liability to Recover Future Net Salvage Estimated 2008 and 2009 (\$ in Thousands)

	[A]	[B]	[0	C]=[A]x[B]	[D]= Subtotal[C]/	[E]			[F]=[D]/[E]
	12/31/07 Recorded Plant	Net Salvage Rate per D&O No.	E	2008 Estimated	Subtotal[A] Weighted Avg COR Accrual		12/31/08 Est Plant Balances		TY 2009 Estimated
Account Number	Balances	21331	C	OR Accrual	Rate	٧	VP-1401 pg.2	C	OR Accrual
311.00	\$ 80,821	0.00200	\$	162					
312.00	269,384	0.00206		555					
314.00	126,873	0.00194		246					
315.00	41,001	0.00195		80					
316.00	17,026	0.00209		36					
341.00	854	0.00085		1					
342.00	4,636	0.00096		4					
343.00	10,954	0.00085		9					
344.00	6,207	0.00091		6					
345.00	3,874	0.00100		4					
346.00	445	0.00067		0					
Production	562,075			1,103	0.00196	\$	584,989	\$	1,147
350.10	9,585	0.00000		-					
352.00	33,202	0.00385		128					
353.00	205,649	0.00490		1,008					
354.00	17,404	0.00600		104					
355.00	150,739	0.01042		1,571					
356.00	73,611	0.02286		1,683					
357.00	45,469	0.00167		76					
358.00	43,211	0.00400		173					
359.00	2,404	0.00000		-					
Transmission	581,274	0.0000		4,742	0.00816		596,329		4,865
	,			,,,,,					,,,,,,,
360.10	322	0.00000		-					
361.00	23,030	0.00500		115					
362.00	135,734	0.00851		1,155					
364.00	105,278	0.01250		1,316					
365.00	87,664	0.03125		2,740					
366.00	206,620	0.00500		1,033					
367.00	238,736	0.02250		5,372					
368.00	136,977	0.01111		1,522					
369.10	38,743	0.03750		1,453					
369.20	146,268	0.02100		3,072					
370.00	27,830	0.00000							
Distribution	1,147,202			17,777	0.01550		1,185,574		18,371
390.00	46,804	0.01111		520					
394.00	1,765	(0.00067)		(1)					
395.00	153	0.00000		-					
397.00	84,521	0.00417		352					
398.00	1,109	0.00227		3					
General	134,352			874	0.00650		136,464		888
392.00	27,214	(0.00357)		(97)					
Vehicles	27,214			(97)	(0.00357)		29,638		(106)
Grand Total	\$ 2,452,117		\$	24,398		\$	2,532,994	\$	25,165

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HECO-WP-1405 DOCKET NO. 2008-0083 PAGE 1 OF 2

## Hawaiian Electric Company, Inc. Calculation of 2000 Depreciation Study Rates Weighted for Depreciable Asset Balance (\$ in Thousands)

	Depreciable	Straight-Line	Depreciation
	Assets a/o	Remaining-Life	Accrual
Account	1/1/08	Rates	Year 2008 \$ 1,557
311	\$ 80,821	0.019270 *	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
312 314	269,384	0.017140 * 0.013620 *	4,617 1,728
	126,873 41,001		712
315 316		0.017370 * 0.023370 *	398
Tot - Steam	17,026 535,105	0.025370	9,013
Tot - Steam	555,105	0.010043	9,013
341	854	0.008900 *	8
342	4,636	0.015690 *	73
343	10,954	0.008760 *	96
344	6,207	0.011310 *	70
345	3,874	0.017760 *	69
346	445	-0.006400 *	(3)
Tot - Gas Turbine	26,970	0.011585	312
Tot - Production	562,075	0.016591	9,325
3501	9,585	0.009000 *	86
352	33,202	0.024000 *	797
353	205,649	0.025600 *	5,265
354	17,404	0.025700 *	447
355	150,739	0.030900 *	4,658
356	73,611	0.051900 *	3,820
357	45,469	0.017000 *	773
358	43,211	0.024100 *	1,041
359	2,404	0.015800 *	38
Tot - Transmission	581,274	0.029118	16,926
3601	322	0.020500 *	7
361	23,030	0.033500 *	772
362	135,734	0.029900 *	4,058
364	105,278	0.032900 *	3,464
365	87,664	0.065400 *	5,733
366	206,620	0.022000 *	4,546
367	238,736	0.054500 *	13,011
368	136,977	0.060500 *	8,287
369.1	38,743	0.072600 *	2,813
369.2	146,268	0.039500 *	5,778
370	27,830	0.030500 *	849
Tot - Distribution	1,147,202	0.042988	49,317
Tot - Distribution	1,147,202	0.042300	40,017
Tot - T & D	1,728,476		66,242
390	46,804	0.040900 *	1,914
394	1,765	0.036700 *	65
395	153	0.034500 *	5
397	84,522	0.059400 *	5,021
398	1,109	0.051800 *	57
Tot - General	134,353	0.052566	7,062
Sub-Total	2,424,904		82,630
3902 (King)	6,721	0.002870	32
3902 (CPP)	1,071	0.000850	35
3902 (Hon CI)	7	0.000000	-
Tot- LH Improvements	7,799	0.00000	67
392	27,214	0.072700 *	1,978
Utility Total	\$ 2,459,917	0.034422	\$ 84,675
	-4.5545.41		

Note: Numbers may not total exactly due to rounding.

<sup>\*</sup> Agreed to D&O No. 21331, dated September 3, 2004 Docket No. 02-0391 Attachment C.

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HECO-WP-1405 DOCKET NO. 2008-0083 PAGE 2 OF 2

## Hawaiian Electric Company, Inc. Calculation of 2000 Amortizable Rates Weighted for Amortizable Plant Balance (\$ in Thousands)

Account	[A] Amortizable Assets a/o 1/1/08	[B] Amortization Rates (%) Note (1)	[A]x[B] Amortization Accrual Year 2008
316 - Steam	\$ 5,097	0.050000 *	\$ 255
310 - Steam	φ 5,037	0.030000	φ 255
346 - Other Production	-	0.050000 *	-
Tot - Production	5,097	0.050000	255
rot i roddollori	0,007	0.00000	
3911	11,662	0.142860 *	1,666
3912	1,990	0.083340 *	166
3913	8,959	0.066670 *	597
393	1,199	0.040000 *	48
394	10,985	0.066670 *	732
395	1,321	0.066670 *	88
396	313	0.055560 *	17
398	2,418	0.050000 *	121
Tot - General	38,847	0.088445	3,436
	22,011	0.0001.10	5,100
Utility Total	\$ 43,944	0.083987	\$ 3,691

Note: Numbers may not total exactly due to rounding.

<sup>\*</sup> Agreed to D&O No. 21331, dated September 3, 2004 Docket No. 02-0391 Attachment D.

Confidential Information Deleted Pursuant To Protective Order, Filed on November 21, 2008.

RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 ATTACHMENTS 1-5

Attachments 1 to 5 contain confidential information and are being provided subject to Protective Order, filed on November 21, 2008.

## INTEROFFICE CORRESPONDENCE

RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 ATTACHMENT 6 PAGE 1 OF 4



Hawaiian Electric Co., Inc.

November 28, 2008

#### **PRELIMINARY**

To:

2009 Test Year Rate Case - Rate Case Update

From:

**Facilities Division** 

Subject:

Ward Archer Lane Base Yard Concrete Improvements Estimated Costs

#### Archer Lane gate concrete improvements

#### Concrete estimates:

- \$43.00 per square foot. This cost is based on an estimate provided by one of our contractors (\$310,000 divided by the 7,200 square feet of working area).
- Total estimated concrete to be removed and replaced: 7,200 square feet.
- Total estimated cost to replace concrete: \$310,000.

#### Reason to replace concrete:

- A main goal of this project is to prevent tripping and fall hazards. There are a lot of concrete/asphalt cracking and crumbling around the vicinity of the Archer Lane guard shack. There are approximately 130 parking stalls on the Cooke Street side of the property. Employees who park there have to walk through this area to get to and from either their personal vehicles or company vehicles.
- Another goal of this project is to provide a firm and strong road surface capable of supporting HECO underground and overhead line trucks. These trucks range from ten to over twenty tons each. Without resurfacing, the wear and tear on the existing surface would exacerbate the safety problems.
- The Archer Lane entry gate is a very heavily used ingress and egree point, for HECO
  employees, HECO vehicles and vendor/suppliers delivering heavy items such as
  underground cable spools and new transformer oil, and picking up used transformer oil
  in large storage tanks.
- Due to the amount of use and the continuous operational use of this gate and surrounding areas, it is very important to have a strong, firm, and safe road surface for the safe daily operations of HECO's, vendors/suppliers', and employees' vehicles; and to provide a safe environment for foot traffic for HECO's operational personnel such as meter reading and fleet operations, and office employees.

2009 TY Rate Case Update November 28, 2008 Page 2 of 4 RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 ATTACHMENT 6 PAGE 2 OF 4

#### New underground duct work installations

Duct work installation:

- Approx. cost of \$120 per linear foot. This cost is based on a contractor's estimate for trenching, installation of new ducts, concrete jacket surrounding the ducts, and pouring new base course material to be compacted on top of the jacket. New concrete cost is included in the contractor's estimate. This estimate is based on a average cost since installation of ducts can vary due to the quantity of ducts placed in one trench.
- Includes duct material and concrete jacket.
- Total duct work length: approximately 500 lineal feet.
- Total estimated cost to install new duct work: \$60,000

Additional cost associated with duct work:

- Additional costs include the installation of concrete electrical boxes
- Fabrication and installation of new meter socket and mounting bracket.
- Total estimated cost: \$10,000

#### Pole, transformer, and equipment replacement

The existing conditions include a single overhead transformer mounted on a wooden pole placed to the right of the existing gate. Removing this wooden pole and transformer and replacing it with a ground installed pad mounted transformer would facilitate future maintenance and possible reduce future maintenance cost. If included as part of the concrete replacement project, there would be no need for the use of a pole truck to service the overhead transformer currently mounted on the existing pole. Maintenance cost to replace or repair electrical equipment would be reduced. Furthermore, servicing a pad-mounted transformer would be easier for our crews.

Future saw cutting of concrete to install new ducts and electrical lines would not be needed if the existing pole is replaced as part of this project.

Saw cutting the concrete in the future would not be needed, therefore reducing maintenance costs. The existing conditions include an overhead electrical feed to the spot lights needed for security surveillance. Replacing the line and the pole mounted transformer would reduce possible accidents, ease maintenance of transformer and increase aesthetics to the nearby Archer Lane Condominium.

HECO C&M Division would be tasked to remove the existing pole, transformer and equipment, and replace them with a pad-mounted transformer and equipment.

Preliminary cost estimate: \$30,000.

2009 TY Rate Case Update November 28, 2008 Page 3 of 4 RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 ATTACHMENT 6 PAGE 3 OF 4

#### **Electrician labor and materials**

Work by HECO electrician includes:

- Mounting of electrical splice boxes, meter sockets and miscellaneous connections.
- Temporary disconnection of electrical feed.
- Temporary electrical connections if needed.
- Installation of new electrical cabling for the security guard house.
- Install new electrical cabling for security lighting
- Total estimated cost: \$20,000

#### Outside contractor for communications cabling

Work to remove existing overhead cabling and install new underground connections

- Install new cabling and remove existing overhead cabling. Shorter distance would increase connectivity from guard station to Command Center and increase signal reliability.
- Install temporary communication cabling to a temporary security station. This would also include phone connections.
- Remove "long run cabling" which disturbs quality of connections due to distance.
- Total estimated cost: \$25,000

Existing conditions put the overhead communication cabling at risk of damage or being cut from large vehicles transiting or operating in the immediate area. Placing the cabling in an underground duct would reduce future cost for security cabling for devices such as surveillance cameras and card access readers by reducing the installation cost. Existing infrastructure would already by there. Currently we do not have an existing infrastructure to support added communication cabling and equipment. Installation of the ducts would also support future security and communication cabling needs for future projects without having to saw cut into the new concrete surrounding the guard station at Archer Lane.

#### Other cost associated with project

Other preliminary cost estimates associated with this project include the following:

Project manager time: \$8,750Building permitting fee: \$5,000

Consultants fees: \$15,000

Relocate security guards to a temporary location: \$41,250

2009 TY Rate Case Update November 28, 2008 Page 4 of 4 RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 ATTACHMENT 6 PAGE 4 OF 4

#### Summary of project costs:

HECO is still in the process of assessing and defining the details of some of the work needed to accomplish this project. For budgeting purposes, given the estimates received for the major work activities on this project, and HECO's order-of-magnitude estimates of the remaining costs, a total of \$525,000 was budgeted in 2009 to complete this project. Below is a summary of this budget amount:

Concrete work	\$	310,000	Contractor estimate
Duct installation work		60,000	Contractor estimate
Additional related duct work		10,000	Contractor estimate
Communications cabling		25,000	<b>HECO</b> internal estimate
Project manager		8,750	<b>HECO</b> internal estimate
Building permitting fee		5,000	<b>HECO</b> internal estimate
Electrician labor and materials		20,000	<b>HECO</b> internal estimate
Pole, transformer and equipment replacen	nent	30,000	<b>HECO</b> internal estimate
Consultants fee		15,000	<b>HECO</b> internal estimate
Temporary relocation of security		41,250	<b>HECO</b> internal estimate
Total	\$	525,000	Used in 2009 budget

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RATE CASE UPDATE DOCKET NO. 2008-0083 HECO T-14 ATTACHMENT 7 PAGES 1-9 OF 9

Attachments 7 contains confidential information and is being provided subject to Protective Order, filed on November 21, 2008.